Saddleback Ridge Wind, LLC // natural Resource Protection Act (NRPA) and Site Location of Development Act applications

Additional Documents from DEP Licensing Record

- Technical Memorandum (Enrad Consulting – May 4, 2011)

Technical Memorandum

To: Mark Margerum, MDEP project manager

From: Warren Brown, EnRad Consulting

Date: May 4, 2011

Re: REVIEW – Saddleback Ridge Wind Project turbine blade change noise assessment

The reviewer notes, the proposed turbine change from the GE 2.75-100 to the GE 2.75-103 with a resulting decreased individual turbine sound power level of 1.5 dBA. The noise impact study subsequently proposes a reduction in the extent and use of nighttime NRO (previously turbines 6-10) to turbines 8 (NRO 104) and 9 (NRO 103) only.

Modeling results are essentially unchanged from the previously proposed turbine/NRO configuration. RSG indicates that the predicted sound level at the nearest nonparticipating residential protective location (B-002) is 45.3 dBA without NRO and 45 dBA with respective NRO settings on turbines 8 and 9.

The proposed application of NRO to turbines 8 and 9 are confirmed by the applicant's consultant RSG by two common methods to account for ground attenuation and modeling uncertainties as employed in MDEP wind turbine project applications.

Saddleback Ridge Wind (SRW) proposes to include in any post-construction monitoring plan a demonstration of (nighttime) compliance with all turbines set in normal operating mode – predicted sound level at (B-002) of 45.3 dBA.

RECOMMENDATIONS

In my opinion the Saddleback Ridge Wind Project wind turbine blade change noise assessment is reasonable and technically correct according to standard engineering practices and the Department Regulations on Control of Noise (06-096 CMR 375.10).

The January 21, 2011 SRW Noise Impact Assessment Peer Review Conclusion with recommendations remains appropriate for the newly proposed design involving NRO at only turbines 8 and 9. Operational testing without NRO should be permitted only after a successful demonstration of nighttime compliance sound levels less than 45 dBA, inclusive of tonal and SDRS penalties.